

# KINDERGARTEN STANDARDS AND LEARNING ACTIVITIES

## Strand: Number Sense and Operations

### NUMBER SENSE

**K.NSO-N.1.** Count by ones to at least 20.

*Example: Recite The Graceful Elephant, a Mexican folktale, and tell what number comes after 11, after 12, etc.*

**K.NSO-N.2.** Represent, name, and order a set of objects (up to 20).

*Example: Build towers with connecting cubes, then match the numeral cards to the towers.*

**K.NSO-N.3.** Match quantities up to at least 10 with numerals and words.

*Example: Using a picture of a house with six windows, place one counter onto each window, then count the windows, and circle the number that tells how many windows.*

**K.NSO-N.4.** Compare sets of up to at least 10 concrete objects using appropriate language (e.g., none, more than, fewer than, same number of, one more than).

*Example: Compare the blocks in two boxes. Tell which box contains more blocks and explain the way in which the answer was decided.*

**K.NSO-N.5.** Identify positions of objects in sequences (e.g., first, second) up to fifth.

*Example: Point out the fifth child from the front of a line of children.*

**K.NSO-N.6.** Identify U.S. coins by name and determine their value.

*Example: With a collection of pennies and nickels, count, then write the total amount of money.*

### FRACTIONS

**K.NSO-F.7.** Understand the concepts of whole and half.

*Example: Working with an even number of connecting cubes to make one whole train, break the train into two equal parts or halves.*

### COMPUTATION AND OPERATIONS

**K.NSO-C.8.** Use objects and drawings to model and solve related addition and subtraction problems to 10.

*Example: Working with cubes in two colors, put together 3 blue cubes with 2 yellow cubes, then count the total number of cubes.*

### ESTIMATION

**K.NSO-E.9.** Estimate the number of objects in a group and verify results.

*Example: Estimate the number of marbles in a bag by inspection. Then remove and count the marbles and compare the estimate to the count.*

## Strand: Patterns, Relations, and Algebra

**K.PRA.1.** Identify the attributes of objects as a foundation for sorting and classifying.

*Example: Group a collection of objects by something they have in common, e.g., a red truck, a red block, and a red ball share the attribute of being red; a square block, a square cracker, and a square book share the attribute of being square. Explain the grouping.*

**K.PRA.2.** Sort and classify objects by attributes and explain; identify objects that do not belong to a particular group.

*Example: Sort objects by color, shape, size, number, and other properties (e.g., all these objects are red; those are green). Explain the choices.*

**K.PRA.3.** Identify, reproduce, describe, extend, and create color, rhythmic, shape, number, and letter repeating patterns with simple attributes.

*Example:*

○	□	↑	○	□	↑	○	—	—	—
1	2	3	4	5	6	7	8	9	10

*Ask students to identify the pattern and draw shapes 8, 9, and 10.*

**K.PRA.4.** Count by fives and tens up to at least 50.

## Strand: Geometry

**K.G.1.** Name shapes of pattern blocks (e.g., triangle, square, circle).

*Example:*

1. Count the sides of each shape.
2. Count the corners of each shape.
3. Tell the name of each shape.



**K.G.2.** Describe attributes of two-dimensional shapes (e.g., number of sides, number of corners, size, roundness); sort these shapes.

*Example: Compare the number of sides of triangles, squares, and circles.*

**K.G.3.** Identify and compare three-dimensional shapes.

*Example: Compare the number of sides of a sphere, box, and pyramid.*

**K.G.4.** Identify positions of objects in space and use appropriate language to describe and compare their relative positions.

*Example: Explore positions in space (up-down, over-under, high-low, behind-in front of, inside-outside, below-on top) and relative distance between objects or locations (near-far, next to, close to, besides, apart-together). For example, "Name objects that are near your desk, objects that are in front of it, and objects far away from it."*

## Strand: Measurement

**K.M.1.** Recognize and compare objects with respect to the attributes of length, volume/capacity, weight, area, and time using appropriate language.

*Example: Use a scale or balance to determine if 20 crayons are heavier than a shoe. Other comparisons include longer, taller, shorter, same length; lighter, same weight; holds more, holds less, holds the same amount.*

**K.M.2.** Make and use estimates of measurements from everyday experiences.

*Example: Estimate 1) how many cups of water are needed to fill a large container, 2) which container will hold the most jelly beans, or 3) the number of beads needed to make a necklace or bracelet. Count or measure to verify the actual results of the students' estimates.*

**K.M.3.** Use standard and nonstandard units to measure length.

*Example: Use paper clips to measure crayons, pencils, and rulers. Compare the lengths of these objects to each other and use appropriate vocabulary to describe them.*

**K.M.4.** Order events in a day.

*Example: Read the big book Around the Clock with Harriet. After mixing up the events and times, put them in order.*

*Example: Tell in order what you did today.*

**K.M.5.** Tell time to the nearest hour.

*Example: Show recess time on a digital clock and transfer it to an analog clock.*

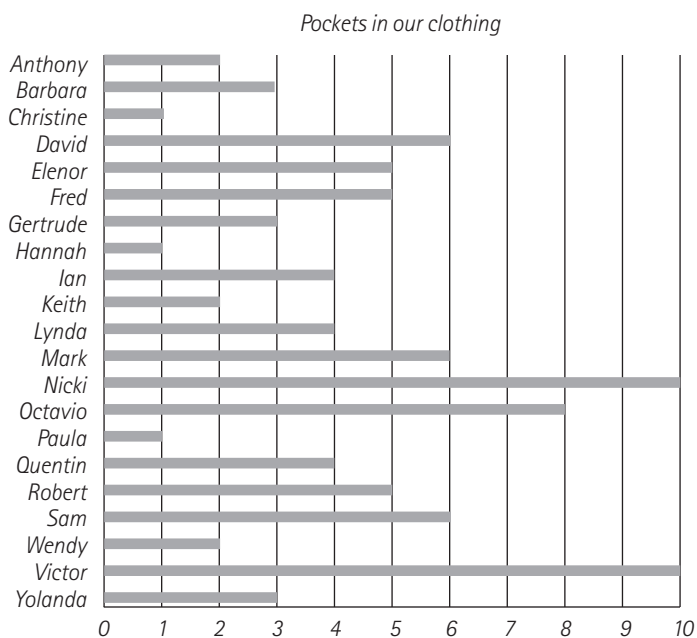
**K.M.6.** Identify U.S. coins and their value.

*Example: Determine how many pennies have the same value as two nickels.*

## Strand: Data Analysis, Statistics, and Probability

**K.DASP.1.** Gather data about self and the environment to answer questions of interest to children; record the results using concrete graphs and simple picture graphs to display data.

*Example: Create a bar graph that illustrates the number of pockets in classmates' clothes.*



**K.DASP.2.** Describe relationships displayed in graphs, tables, or other representations.

*Example: Using chips to represent objects in the stories below, who has more hats?*

### Story 1

*Ms. Chapeau has large floppy hats. Put down one chip for each hat.*

*Ms. Chapeau has a red hat with stars.*

*She has a pink hat with flowers.*

*She has a green hat with ribbons.*

*She has a blue hat with feathers.*

*How many large floppy hats does she have?*

### Story 2

*Mr. Miller has animal hats. Put down one chip for each hat.*

*Mr. Miller has a zebra hat with stripes.*

*He has a snake hat with scales.*

*He has a dog hat that barks.*

*How many animal hats does he have?*